



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,106	06/27/2006	Jeff Buchko	1993.70WOUS	5605
24113 7590 05/12/2010 PATTERSON THUENTE CHRISTENSEN PEDERSEN, P.A. 4800 IDS CENTER 80 SOUTH 8TH STREET MINNEAPOLIS, MN 55402-2100			EXAMINER SINGH, SUNIL	
			ART UNIT 3672	PAPER NUMBER
			MAIL DATE 05/12/2010	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/568,106	<b>Applicant(s)</b> BUCHKO, JEFF	
	<b>Examiner</b> Sunil Singh	<b>Art Unit</b> 3672	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2,3,5-17 and 19-27 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,3,16,17,19,20,27 is/are rejected.
- 7) ☒ Claim(s) 5-15 and 21-26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2,3,16,17,19,20,27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zamboni (US 4705320) or Bricher (US 3917350) in view of Rzechula (US 4944103) or Canadian documents (2389770, 2394085).

Zamboni and Bricher both disclose an ice conditioning apparatus comprising: an ice conditioning machine mounted on wheels for movement along an ice surface in an operating travel direction; a blade bar (see Fig. 3-5,8; Figs. 1-3,15) mounted on the ice conditioning machine; an ice blade (see Figs. 3-5,8; Figs. 1-3,15) defining a cutting edge on a lower front edge thereof; a plurality of bolts attached to the blade bar and operative to exert a holding force on the ice blade and to hold the ice blade against the blade bar in an operating position such that the ice blade is oriented substantially parallel to the ice surface; wherein the blade bar and ice blade define blade guides (the v-shaped guides depicted in Figure 3, wall shown in Figure 15) operative to prevent sliding movement of the ice blade out of the operating position when the cutting edge engages the ice surface in the operating travel direction; a blade height control (see Fig. 1, see Figs. 1-3) operative to move the blade bar with respect to the wheels to move the ice blade up and down. Zamboni and Bricher both disclose the invention

Art Unit: 3672

substantially as claimed. However, they lack magnetic means for holding the ice blade to the blade bar. Rzechula and both Canadian documents teach magnetic means for holding two structures together (see col. 3, 6 and abstracts). It would have been considered obvious to one of ordinary skill in the art to modify either Zamboni or Bricher by substituting the magnetic holding means as taught by Rzechula or either Canadian documents for the bolt holding means disclosed by either Zamboni or Bricher in order to facilitate the blade assembly and disassembly.

With regards to claims 16,17, it would have been considered obvious to modify the magnets to be electromagnets in order to facilitate attaching and detaching.

With regards to claims 19,20,27, the recited method steps are considered obvious in view of the claimed combination above.

### ***Allowable Subject Matter***

3. Claims 5-15, 21-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

4. Applicant's arguments filed 1/21/09 have been fully considered but they are not persuasive. Applicant argues that Zamboni fail to teach blade guides. The examiner disagrees. Inasmuch members 32,34 in applicant's Figure 4 is considered blade guides then so is the v-shaped guides depicted in Figure 3 of Zamboni. Applicant argues that the Canadian documents teach to magnetically release the blade from the blade bar

Art Unit: 3672

when an obstruction is contacted; therefore it would not be obvious to modify Zamboni to attach it members via magnets. The examiner disagrees. Depending on the design parameters, the magnetic force would be adjusted accordingly. For example, one skilled in the art would provide magnets having enough magnetic force to allow the blade to be attached to the blade bar during the shaving of ice off an ice rink. However, if one were to encounter e.g. an obstruction, it would be obvious to have the magnets cause the blade to be released from the blade bar to avoid damaging the machine and/or blade.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil Singh whose telephone number is (571) 272-7051. The examiner can normally be reached on Monday through Friday 10:30 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3672

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sunil Singh/  
Primary Examiner, Art Unit 3672

Sunil Singh  
Primary Examiner  
Art Unit 3672

SS

5/4/10